

INERTIAL POSITION TARGET MEASURING SYSTEMS AND METHODS

ABSTRACT OF THE DISCLOSURE

Systems and methods for contiguously and accurately updating target object information during an entire target engagement period are provided. The target tracking
5 system includes a database for storing starfield information, an optical beam source configured to illuminate one or more optical beam pulses, first and second camera systems, and a processor. The processor instructs the first camera system to track the object based on recordation of the tracked object, instructs the second camera system to stabilize the tracking
10 image based on the instructions sent to the first camera system, and determines inertial reference information of the tracked object based on the stabilized image and starfield information associated with the stabilized image.